

# **DECLARATION UNDER 35 U.S.C. § 1.132**

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Sir:

I, Gerald Wayne Both am a co-inventor of the above-identified patent application entitled "DNA Encoding Ovine Adenovirus (OAV287) And Its Use As A Viral Vector." My curriculum vitae is enclosed herewith.

I have become aware of a clerical error in Figure 13 of the above-identified patent application. Figure 13 was added at the time of filing the continuation-in-part application (USSN 464,767)in order to correct mistakes in the nucleotide sequence of the OAV287 virus genome, which is shown in Figure 1. The nucleotide sequence illustrated in Figure 13 differs from the sequence illustrated in Figure 1 at seven positions that are demarcated by either an "X" in bold and of larger font than the surrounding letters to indicate deletion of a nucleotide from the sequence shown in Figure 1 or by insertion of the corrected sequence, indicated by bold letters of larger font than those surrounding the insertion. No other changes are indicated in Figure 13.

However, I have become aware that one nucleotide in the original sequence set forth in Figure 1 was inadvertently dropped in the process of when making Figure 13. In Figure 1, a "T" appears in the sequence at position

24776 (the surrounding sequence is "AGAAATAGTT"; the "T" in question is underlined). However, in the corresponding sequence set forth in Figure 13, the "T" does not appear. The corresponding sequence in Figure 13 reads "AGAAAGAGTT." The sequence of Figure 1 was amended in Figure 13 by addition of a "G" at position 24777, however in the process of transcribing the change a "T" was inadvertently dropped from the sequence.

It is clear that the "T" was not intentionally deleted since an "X" does not appear in its place, whereas at every other site in the corrected sequence of Figure 13 where a nucleotide was deleted an "X" is inserted to show that the nucleotide was deleted. For example, immediately downstream of the sequence in question, an "X" appears in Figure 13 to illustrate the deletion of a "G" at position 24818 from the sequence shown in Figure 1. Another "X" appears in Figure 13 to illustrate the deletion of the "C" shown at position 1140 in Figure 1. Such demarcations of deletions within nucleotide sequences are routinely used. Thus, it would be understood by one of ordinary skill in the art that no change to the sequence is intended at position 29776 and that the "T" shown in Figure 1 is a part of the OAV287 sequence.

I declare further that all statements made herein of my own knowledge are true and that all statements made on information and belief are believed to be true; and further that these statements were made with the knowledge that willful false statements and the like so made are punishable by fine or imprisonment, or both, under Section 1001 of Title 18 of the United States Code, and that such willful false statements may jeopardize the validity of the application or any patent issuing thereon.

#### **CURRICULUM VITAE**

NAME: BOTH, Gerald Wayne

**DATE AND PLACE OF BIRTH:** January 12, 1949; Angaston,

South Australia

MARITAL STATUS: Married. Two children.

**EDUCATION:** 

1961-1965 Nuriootpa High School, Nuriootpa, South Australia

1966-1969 Bachelor of Science (Honours) - Biochemistry - University of

Adelaide, Adelaide, South Australia

1970-1973 Doctor of Philosophy - University of Adelaide

**BRIEF CHRONOLOGY OF EMPLOYMENT:** 

1973-1975 Postdoctoral Fellow, Department of Cell Biology, Roche Institute of

Molecular Biology, Nutley, New Jersey, U.S.A.

1976-1978 Visiting Fellow, Department of Microbiology, John Curtin School of

Medical Research, Australian National University, Canberra,

Australia.

1978-present Research Scientist (RS), Senior RS, Principal RS, Senior Principal RS,

Programme Leader (1992-1997), Chief Research Scientist (July 1998-present); CSIRO Division of Molecular Science, North Ryde,

NSW.

### **FELLOWSHIPS:**

Intermediate Exhibition
Commonwealth Secondary Scholarship
Commonwealth Open Scholarship
Commonwealth Postgraduate Award in Biochemistry
Postdoctoral Research Fellowship (Roche Institute of Molecular Biology)
Queen Elizabeth II Fellowship (held at ANU)

#### **AWARDS:**

**Boehringer Medallist 1985** (National Award by the Australian Society for Biochemistry and Molecular Biology)

#### **SOCIETIES**

Australian Society for Biochemistry and Molecular Biology (1970-1999)

Genitourinary Oncology Group, NSW

American Society of Gene Therapy

Australasian Gene Therapy Society

#### **RESEARCH INTERESTS:**

- 1. Structure and function of adenovirus genes and proteins
- 2. Design and construction of recombinant ovine and human adenoviruses for gene delivery
- 3. Delivery of the rapeutic genes for prostate cancer

### **COMMITTEES**

- 1. Co-organizer Vaccines Conference Lorne 1986, 1988, 1990 and 1993,
- 2. **Principal Organiser**, Boden Conference on Gene Therapy, Thredbo, NSW, Feb 4th-7th, 1997.
- 3. Co-organiser, 2<sup>nd</sup> meeting Australasian Gene Therapy Society, Sydney, April 27-29<sup>th</sup>, 2001.
- 4. **Member** Genetic Manipulation Advisory Committee (GMAC) 2000-2001.
- 5. **Member** Gene Technology Technical Advisory Committee, June 2001-present.
- 6. Foundation Vice-President Australasian Gene Therapy Society, 2001.

### PhD STUDENTS

S. Clare Stirzaker, David B. Mitchell and Marilyn Clarke and Apru Khatri successfully completed their degrees in Feb. 1989, Feb. 1990 and Dec 1994 and Mar 1998, respectively.

### REFEREE FOR

Aust. Research Council

NH&MRC

World Health Organisation

Welcome Foundation

Human Frontier Science Programme

Italian Ministry of University and Scientific Research
Royal Children's Hospital Foundation, VIC.

Journal of Virology (USA), Archives of Virology, J Gen Virology
Examined many PhD theses for Australian Universities

### PUBLICATIONS -April 2001.

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- 2. **Both, G.W.**, McInnes, J.L., May, B.K. and Elliott, W.H. (1971). Recovery of *Bacillus amyloliquefaciens* protein synthesis from inhibition by pactamycin. Biochem. Biophys. Res. Commun. **43:** 1095.
- 3. **Both, G.W.**, McInnes, J.L., Hanlon, Joan E., May, B.K., Elliott, W.H. (1972). Evidence for an accumulation of messenger RNA specific for extracellular protease and its relevance to the mechanism of enzyme secretion in bacteria. J. Mol. Biol. **67**: 199.
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- 5. Glenn, A.R., **Both, G.W.**, McInnes, J.L., May, B.K. and Elliott, W.H. (1973). Dynamic state of the messenger RNA pool specific for extracellular protease in *Bacillus amyloliquefaciens:* its relevance to the mechanism of enzyme secretion. J. Mol. Biol. **73:** 221.
- 6. **Both, G.W.**, Lavi, S. and Shatkin, A.J. (1975). Synthesis of all the gene products of the reovirus genome *in vivo* and *in vitro*. Cell **4:** 173.
- 7. **Both, G.W.**, Moyer, S.A. and Banerjee, A.K. (1975). Translation and identification of mRNA species synthesized *in vitro* by the virion-associated RNA polymerase of vesicular stomatitis virus. Proc. Natl. Acad. Sci. USA **72:** 274.
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- 9. **Both, G.W.**, Banerjee, A.K. and Shatkin, A.J. (1975). Methylation-dependent translation of viral messenger RNAs *in vitro*. Proc. Natl. Acad. Sci. USA **72:** 1189.
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- 11. **Both, G.W.**, Furuichi, Y. Muthukrishnan, S. and Shatkin, A.J. (1975). Ribosome binding to mRNA in protein synthesis requires 5'-terminal 7-methylguanosine. Cell **6:** 185.
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- 17. Shatkin, J. and **Both, G.W**. (1976). Reovirus mRNA: transcription and translation. Cell **7**: 305.
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- 22. **Both, G.W.** and Air, G.M. (1979). Nucleotide sequence coding for the N-terminal region of the matrix protein of influenza virus. Eur. J. Biochem. **96:** 363-372.
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- 24. **Both, G.W.** and Sleigh, M.J. (1980). Complete nucleotide sequence of the haemagglutinin gene from a human influenza virus of the Hong Kong subtype. Nucl. Acids Res. 8: 2561-2575.
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- 6. PCT/AU95/00453. DNA Encoding Ovine Adenovirus (OAV287) and its use as a Viral Vector'. Inventors: **G. W. Both**, D. B. Boyle, S. Vrati.

# PATENT APPLICATIONS

4. Regulatory Element (PSM gene enhancer): Inventors: F. Watt, P. L. Molloy and G. W. Both: International Patent Application (PCT filed March 2000; Provisional Patent filed March 1999).

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